WHAT IS CLAIMED IS:

1.   A method for reducing power consumption of a decoder in a communication system, comprising:

estimating a quality metric of a segment of a received signal;

determining a quality metric threshold;

delimiting an interval in accordance with a modified quality metric threshold; and

decoding the segment when the estimated quality metric is outside of the interval.

2.   The method of claim 1 wherein the estimating a quality metric comprises estimating a signal-to-noise ratio.

3.   The method of claim 1 wherein the estimating a quality metric of a segment of a received signal comprises estimating a quality metric of a slot of a received signal.

4.   The method of claim 1 wherein the determining a quality metric threshold comprises:

determined a data rate of the segment;

determining a number of segments received; and

determining a quality metric threshold in accordance with the data rate and the number of segments.

5.   The method of claim 1 wherein delimiting an interval comprises:

determining a real-valued parameter Δ_0; and

defining the interval in accordance with a formula $(-\infty, TS + \Delta_0)$, where TS is the quality metric threshold.

6.   The method of claim 5 wherein the determining a real-valued parameter Δ_0 comprises determining the parameter Δ_0 in accordance with a demodulator performance.

7.   The method of claim 5 wherein the parameter Δ_0 is less than or equal to zero.

8.   The method of claim 1 wherein the decoding the segment comprises:

delimiting a plurality of intervals in accordance with the quality metric threshold;

associating each of the plurality of intervals with one of a plurality of parameters;

determining an interval from the plurality of intervals into which the estimated quality metric belongs; and

decoding the received signal for a number of iterations equal to the one of a plurality of parameters associated with the determined interval.

9. The method of claim 8 wherein the delimiting a plurality of intervals comprises:

determining a plurality of real-valued parameters $\Delta_0 \leq \Delta_1 \leq ... \leq \Delta_m \leq 0 < \Delta_{m+1} \leq \Delta_{m+2} \leq ... \leq \Delta_{m+n}$; and

defining the plurality of intervals in accordance with the formulas:
$[TS + \Delta_{k-1}, TS + \Delta_k)$, for all $k \in (1, n+m)$; and
$[TS + \Delta_{n+m}, \infty)$,

where n, m are non-negative, integer-valued parameters.

10. The method of claim 9 wherein the parameters $\Delta_1, ..., \Delta_m, \Delta_{m+1}, \Delta_{m+2}, ..., \Delta_{m+n}$ are determined in accordance with a demodulator performance.

11. The method of claim 8 wherein a plurality of parameters comprise non-negative, integer-valued parameters $N_1 \leq ... \leq N_m \geq N_{m+1} \geq N_{m+2} \geq ... > N_{n+m+1}$.

12. The method of claim 11 wherein the parameters $N_1, ..., N_m, N_{m+1}, N_{m+2}, ..., N_{n+m+1}$ are determined in accordance with a demodulator performance.

13. The method of claim 1 further comprising:
evaluating a stopping criterion; and
terminating decoding in accordance with the stopping criterion.

14. An apparatus for reducing power consumption of a decoder in a communication system, comprising:
a processor; and
a processor-readable storage medium accessible by the processor and containing a set of instructions executable by the processor to:
estimate a quality metric of a segment of a received signal;

determine a quality metric threshold;

8   delimit an interval in accordance with a modified quality metric threshold; and

10   decode the segment when the estimated quality metric is outside of the interval.

15.   The apparatus of claim 14 wherein the quality metric is a signal-to-noise
2   ratio.

16.   The apparatus of claim 14 wherein the segment of a received signal is a
2   slot.

17.   The apparatus of claim 14 wherein the quality metric threshold is
2   determined in accordance with a data rate of the segment and a number of segments received.

18.   The apparatus of claim 14 wherein the set of instructions is further
2   executable by the processor to delimit the interval by:
    determining a real-valued parameter Δ_0; and
4   defining the interval in accordance with a formula $(-\infty, TS + \Delta_0)$, where TS is the quality metric threshold.

19.   The apparatus of claim 18 wherein the parameter Δ_0 is determined in
2   accordance with a demodulator performance.

20.   The apparatus of claim 18 wherein the parameter Δ_0 is less than or equal
2   to zero.

21.   The apparatus of claim 14 wherein the set of instructions is further
2   executable by the processor to decode the segment by:
    delimiting a plurality of intervals in accordance with the quality metric
4   threshold;
    associating each of the plurality of intervals with one of a plurality of
6   parameters;
    determining an interval from the plurality of intervals into which the
8   estimated quality metric belongs; and
    decoding the received signal for a number of iterations equal to the one
10   of a plurality of parameters associated with the determined interval.

22. The apparatus of claim 21 wherein the set of instructions is further executable by the processor to delimit a plurality of intervals by:

determining a plurality of real-valued parameters $\Delta_0 \leq \Delta_1 \leq ... \leq \Delta_m \leq 0 < \Delta_{m+1} \leq \Delta_{m+2} \leq ... \leq \Delta_{m+n}$; and

defining the plurality of intervals in accordance with the formulas:

$[TS + \Delta_{k-1}, TS + \Delta_k)$, for all $k \in (1, n+m)$; and

$[TS + \Delta_{n+m}, \infty)$,

where n, m are non-negative, integer-valued parameters.

23. The apparatus of claim 22 wherein the parameters $\Delta_1, ..., \Delta_m, \Delta_{m+1}, \Delta_{m+2}, ..., \Delta_{m+n}$ are determined in accordance with a demodulator performance.

24. The apparatus of claim 21 wherein a plurality of parameters comprise non-negative, integer-valued parameters $N_1 \leq ... \leq N_m \geq N_{m+1} \geq N_{m+2} \geq ... > N_{n+m+1}$.

25. The apparatus of claim 24 wherein the parameters $N_1, ..., N_m, N_{m+1}, N_{m+2}, ..., N_{n+m+1}$ are determined in accordance with a demodulator performance.

26. The apparatus of claim 14 wherein the set of instructions further comprises instructions executable by the processor to:

evaluate a stopping criterion; and

terminate decoding in accordance with the stopping criterion.

27. A processor-readable medium for reducing power consumption of a decoder in a communication system, comprising instructions executable by processor to:

estimate a quality metric of a segment of a received signal;

determine a quality metric threshold;

delimit an interval in accordance with a modified quality metric threshold; and

decode the segment when the estimated quality metric is outside of the interval.

28. The processor-readable medium of claim 27 wherein the quality metric is a signal-to-noise ratio.

29.   The processor-readable medium of claim 27 wherein the segment of a received signal is a slot.

30.   The processor-readable medium of claim 27 wherein the quality metric threshold is determined in accordance with a data rate of the segment and a number of segments received.

31.   The processor-readable medium of claim 27 wherein the set of instructions is further executable by the processor to delimit the interval by:
    determining a real-valued parameter Δ_0; and
    defining the interval in accordance with a formula $(-\infty, TS + \Delta_0)$, where TS is the quality metric threshold.

32.   The processor-readable medium of claim 31 wherein the parameter Δ_0 is determined in accordance with a demodulator performance.

33.   The processor-readable medium of claim 31 wherein the parameter Δ_0 is less than or equal to zero.

34.   The processor-readable medium of claim 27 wherein the set of instructions is further executable by the processor to decode the segment by:
    delimiting a plurality of intervals in accordance with the quality metric threshold;
    associating each of the plurality of intervals with one of a plurality of parameters;
    determining an interval from the plurality of intervals into which the estimated quality metric belongs; and
    decoding the received signal for a number of iterations equal to the one of a plurality of parameters associated with the determined interval.

35.   The processor-readable medium of claim 27 wherein the set of instructions is further executable by the processor to delimit a plurality of intervals by:
    determining   a   plurality   of   real-valued   parameters $\Delta_0 \leq \Delta_1 \leq ... \leq \Delta_m \leq 0 < \Delta_{m+1} \leq \Delta_{m+2} \leq ... \leq \Delta_{m+n}$; and
    defining the plurality of intervals in accordance with the formulas:
        $[TS + \Delta_{k-1}, TS + \Delta_k)$, for all $k \in (1, n + m)$; and
        $[TS + \Delta_{n+m}, \infty)$,

where n, m are non-negative, integer-valued parameters.

36. The processor-readable medium of claim 35 wherein the parameters $\Delta_1, ..., \Delta_m, \Delta_{m+1}, \Delta_{m+2}, ..., \Delta_{m+n}$ are determined in accordance with a demodulator performance.

37. The processor-readable medium of claim 27 wherein a plurality of parameters comprise non-negative, integer-valued parameters $N_1 \leq ... \leq N_m \geq N_{m+1} \geq N_{m+2} \geq ... > N_{n+m+1}$.

38. The processor-readable medium of claim 37 wherein the parameters $N_1, ..., N_m, N_{m+1}, N_{m+2}, ..., N_{n+m+1}$ are determined in accordance with a demodulator performance.

39. The processor-readable medium of claim 27 wherein the set of instructions further comprises instructions executable by the processor to:
   evaluate a stopping criterion; and
   terminate decoding in accordance with the stopping criterion.